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ABSTRACT

This publication is intended to help make secondary and college students aware of careers in psychology. Approximately one-half of the booklet contains sketches of 16 jobs in psychology emphasizing teaching, research, and public service. For each job sketch there is a general description of the types of work involved and the educational background required. To help students understand what a career in this area involves, examples of an open position advertisement and a description of a successful applicant are provided. The publication also contains information on the college degrees and employment statistics of psychologists, describes steps to take if one is interested in becoming a psychologist, discusses the difference that education and training make, and talks about the direction in which psychology is headed. A variety of other information sources is included for persons seeking information about a career in psychology. (Author/RM)

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Careers In Psychology

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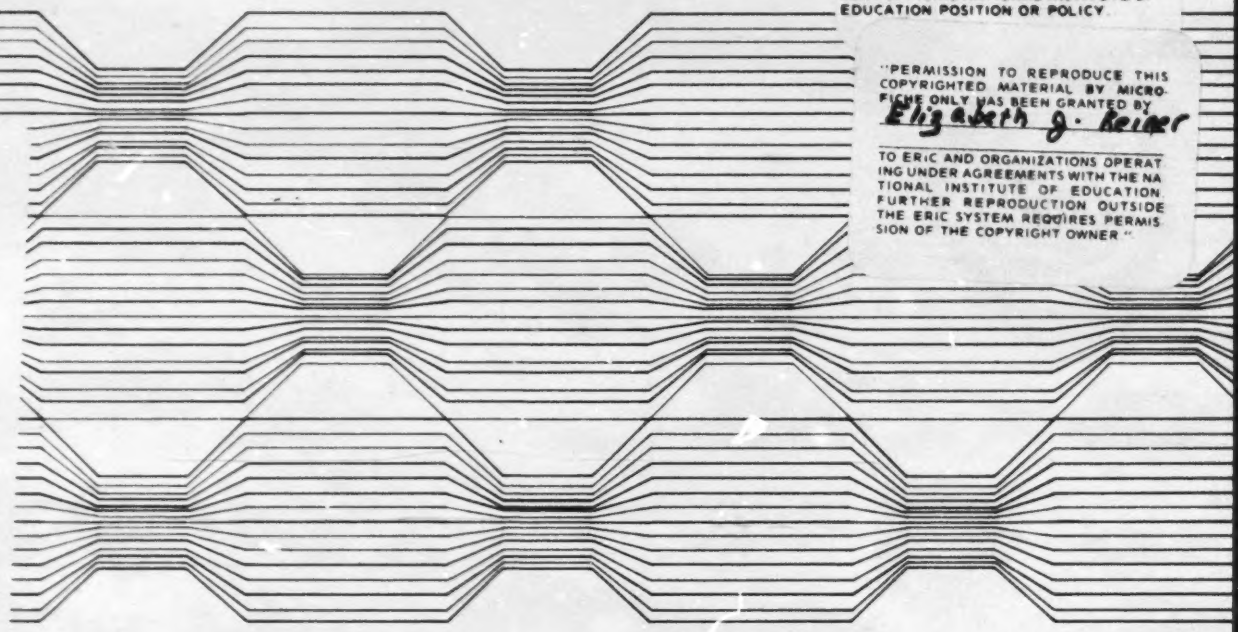

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American Psychological Association

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WHAT IS PSYCHOLOGY?

Overheard in a three-way conversation:

"Psychology is what's already known about human and animal behavior. That's psychology."

"No, psychology is a way of discovering new knowledge about human and animal behavior. That's psychology."

"No, psychology is a way of using what's known about human and animal behavior. That's psychology."

All of these definitions are right, yet each is only partly right. Knowledge about human and animal behavior exists, and that's psychology as a *discipline*—the body of knowledge from which teachers teach. But that knowledge first must be discovered, and that's psychology as a *science*—the special methods that researchers use to study behavior. The knowledge, once generated, may be applied to promote human welfare, and that's psychology as a *profession*—what those in public service and applied psychology do.

There you have a definition in three parts: Psychology includes a body of knowledge, methods of research to obtain such knowledge, and the application of that knowledge to benefit humankind. The trouble is that the definition doesn't tell you very much about what psychology is. To understand fully what the word means, you need to spend some time with it—to see it in action and in context. Psychology in action is what psychologists do. Psychology in context is where psychologists work, with whom and with what they work. To put psychology in action and in context, we have prepared some typical job advertisements and coupled them with fictitious descriptions of persons who might successfully do the job. Before each of these particular descriptions, there is a general description of the type of

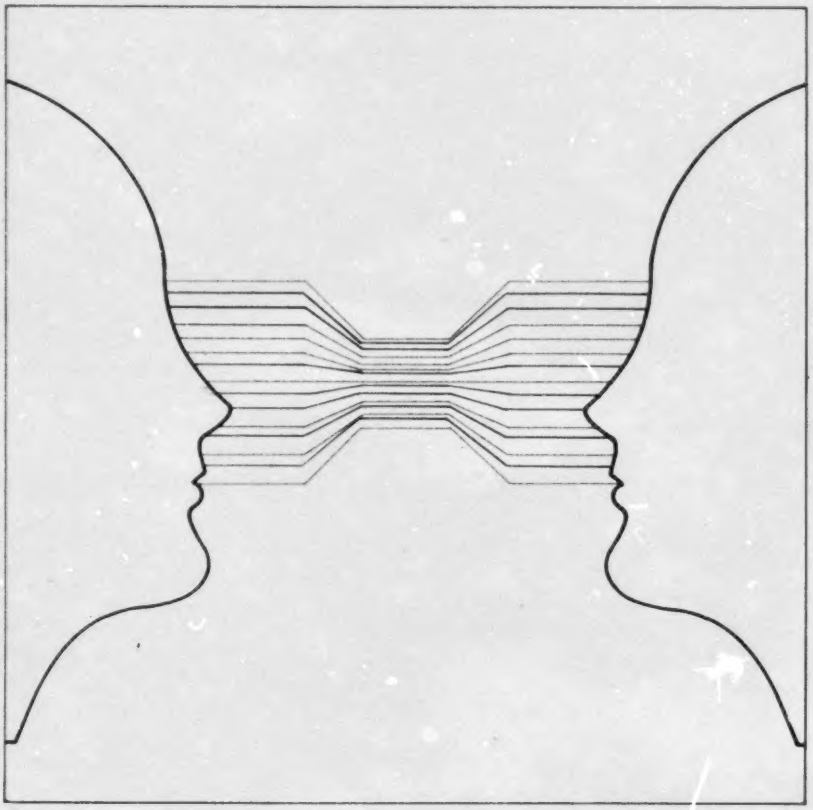
psychologist or psychological worker who is being described.

As you read the sketches, think about the diversity of work the people are doing. Think also about what they have in common—why they are identified as psychologists or psychological workers. Think too about the amount of training after high school that they have had. The level and extensiveness of that training are reflected by the degrees or certificates a person has earned. An associate degree (Associate of Arts or Associate of Science) is earned for approximately two years of study after high school, a bachelor's degree (Bachelor of Arts or Bachelor of Science) after four years of study. Following graduation from college, a master's degree (Master of Arts, Master of Science, or Master of Education) can be earned after one or two years of work as a graduate student; a doctor's degree, whether for the Doctor of Education (EdD), Doctor of Philosophy (PhD), or Doctor of Psychology (PsyD), usually requires four or more years of work. To encourage quality graduate education, the American Psychological Association has set up a process of accreditation for graduate programs in clinical, counseling, and school psychology. Also, in some states, certain kinds of psychologists must be licensed or certified. The requirements and procedures of accreditation and licensing and of certification are discussed in more detail in the section called "How Do I Become a Psychologist?"

Two important points must be noted before you read the following sketches. First, remember that the positions listed are only typical of those available from the type of employer that has been identified. The position is fictional, as is the salary. The salary is typical of 1974 rates. With allowances for inflation, these rates can then be used to estimate the salary now being paid for the same type of position. However, the salaries given are only examples. Consider a person who is an Associate Professor of Psychology with a PhD and eight years of experience and who is employed as a teacher and researcher in a state university. In 1974, such a person could have earned a salary ranging anywhere from $11,500 to $26,900, depending on the particular college or university involved.

Second, each job description is only one among many positions that could illustrate the type of psychologist identified in the general description. For instance, a person called a clinical psychologist might be employed as (a) the chief psychologist in a state mental hospital; (b) the chairperson of the department of psychology in a large state university; (c) a state commissioner of mental health; (d) a member of a practicing professional team that includes a medical doctor, a psychiatrist, and two psychologists; (e) a consultant to an advertising agency; or (f) an independent practitioner.

While you read this booklet, keep in mind that psychology is a highly diverse field. It is very difficult to describe adequately all of the various roles of psychologists. The descriptions that follow are only a sampling of what psychologists do, and many kinds of psychologists could not be included because of space limitations.



CAREERS IN PSYCHOLOGY

TEACHING

EXPERIMENTAL PSYCHOLOGIST is a general title applied to a variety of psychologists who are trained in designing and conducting research in specific areas. Experimental psychology refers historically to the methods by which several different areas of behavioral processes and phenomena are studied. Areas traditionally grouped under this label include learning; sensation and perception; human performance; motivation and emotion; language, thinking, and communication; and comparative and physiological psychology. Experimental psychologists are typically identified by the area in which they do research—learning psychologists, comparative psychologists, etc.—not by the general term *experimental psychologist.* A research-oriented doctor's degree (PhD) is usually needed for advancement and mobility in this field.

Position: Associate Professor, Experimental Psychology
Employer: A large southern university
Salary: $17,500/9 months
Job description: PhD required. Position involves teaching introductory psychology each semester, including supervision of graduate teaching assistants; it also involves teaching an advanced undergraduate course in one of the following areas: research methods, human learning, or sensation/perception. Position requires supervising master's and doctoral students and participating in all aspects (curriculum, scheduling, advising, etc.) of the undergraduate psychology program.

Successful applicant: Susan Cass, 34, majored in psychology at Howard University. She then obtained a master's degree in general experimental psychology and a PhD in learning from Vanderbilt University, where she also

taught introductory psychology while she was a graduate student. In her first job at the University of South Carolina, Dr. Cass supervised an introductory course of 2,500 students, coordinating the teaching activities of eight teaching assistants.

In her new position, Susan Cass advises high school psychology teachers throughout the state and cooperates with 24 of them in offering the introductory course by educational television in local high schools. She also supervises the research of four graduate students, conducts her own research program on short-term memory, and works with the department chairperson in coordinating the undergraduate psychology program with other teaching and research activities of the department.

CLINICAL PSYCHOLOGISTS or clinicians specialize in the assessment and treatment of persons suffering emotional or adjustment problems. Typically, a clinician is knowledgeable about the psychology of personality, psychopathology, and psychometrics, and is trained to diagnose and treat psychological problems ranging from responses to normal developmental crises in adolescence to extreme psychotic conditions. Other skills and techniques may be acquired as he or she assumes new responsibilities, for example, mental health consultation with community agencies.

Like most psychologists, clinicians are often trained in the skills and methods of scientific inquiry. Besides their professional activities in diagnosis and treatment, they may conduct research. For example, they may study the psychotherapist characteristics that are related to patient improvement, or they may look at the conditions under which young children develop a sense of responsibility. Thus, clinical psychologists are often found in academic settings where they may teach, conduct research, provide psychological services, or some combination of the three. No single description can convey the breadth of activities in which different clinical psychologists may be involved. Thus, several illustrations of the work and training of clinical psychologists are included in this booklet. A doctoral degree is generally required to become a clinical psychologist.

Position: Director, Clinical Psychology Center
Employer: A southwestern university
Salary: $21,000/11 months
Job description: PhD required plus a minimum of five to eight years of administrative experience. The Director's role is to provide guidance and planning to assure the smooth functioning of the university's Clinical Psychology Center, a teaching/treatment center that emphasizes behavior modification techniques. He or she will be responsible for scheduling the Center's activities, coordinating faculty supervision of approximately 50 in-training, graduate-student therapists, and teaching a semester graduate-student course on how to practice therapy.

Successful applicant: Eugene Fisher, 36, graduated with a bachelor's degree in psychology from Boston University after transferring from a political science major. He entered the graduate program at the University of British Columbia, Canada, seeking a master's degree in personality psychology, but soon withdrew to enter the Peace Corps for two years of work. He graduated from the University of Oregon with a PhD in clinical psychology and served his one-year clinical internship at the University of Washington School of Medicine. Dr. Fisher spent the next six years on the faculty at the University of Denver, where he served as Director of Clinical Training in the Department of Psychology his last year. At his new position, Eugene Fisher is continuing his research, which compares patients' and therapists' views on the short- and long-term effectiveness of several types of psychotherapy; the research is partly sponsored by the National Institute of Mental Health. He also supervises a therapy course each semester and teaches an undergraduate or graduate class in behavior modification every other semester. Having been certified in his state, he has started his own independent practice, which he maintains during off hours and one full day a week.

TEACHERS OF PSYCHOLOGY AND BEHAVIORAL SCIENCES IN THE HIGH SCHOOL have found an occupation that is a significant source of employment for those who hold a bachelor's degree in psychology. Estimates are that between one-half and three-quarters of a million students are currently enrolled in high school psychology courses across the nation. About half of the states permit teachers to be certified in psychology, but only if accompanied by certification in another

area (such as English or social studies); other states do not have that limitation and grant certification to teach psychology exclusively. The opportunities to teach psychology and behavioral sciences in high schools vary as widely as the schools in which one can be employed, but increasing student enrollments and more liberal state certification requirements are trends that assure an immediate future for teachers of psychology. Nevertheless, full-time high school teachers of psychology are still rare; usually the person teaching psychology is also teaching classes in other subjects or acting as a counselor. A bachelor's degree and a teaching certificate are required, and a master's degree is desirable in all states but is specifically required in some states after a specified number of years in service.

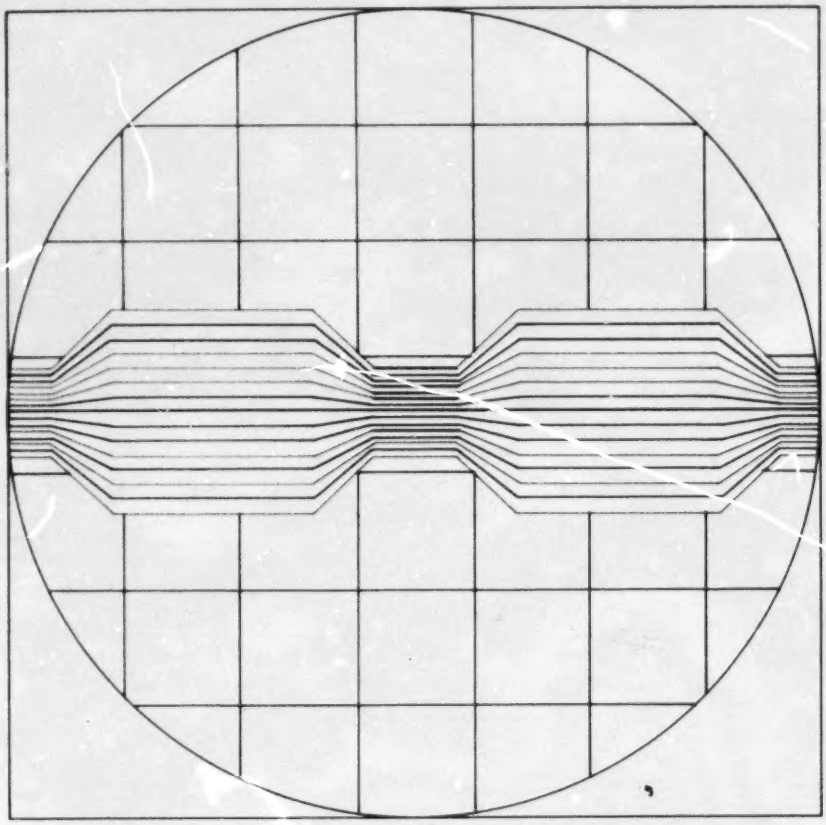
Position: High School Psychology Teacher
Employer: Board of Education in a large midwestern city
Salary: $6,600/9 months with bachelor's degree; $7,500/9 months with master's degree
Job description: Master's degree preferred, bachelor's degree required. Successful candidate without master's degree must earn it within seven years of accepting job. Candidate will teach up to five classes of psychology, depending on student enrollments, and may also teach classes in one of the following areas: sociology, personal adjustment, social studies, history, or biology.

Successful applicant: Allen Farley, 23, graduated from American University with a major in education and a minor in psychology. His program of study provided him with the education courses and student-teaching experience necessary for certification. Now teaching four senior-level sections of psychology, Allen Farley stresses role playing by students and encourages them to volunteer for community-service projects in the metropolitan area. Enrolled in evening classes at the local university, he is working toward his master's degree in education.

COMMUNITY COLLEGE INSTRUCTORS usually reach their positions either directly from graduate school or indirectly after a number of years as high school teachers. A typical work load in the community college involves teaching four to six courses per semester; much of the remainder of the instructor's time is spent advising students or in some community-service activity. Because of the nature of the community college and the role it plays in higher education, instructors in such colleges typically are teaching students who will transfer into four-year institutions or are training paraprofessionals in an associate-degree program. To become a community college instructor, a master's degree is required, and in some schools a doctoral degree is desirable. In certain states, a teaching certificate is also required.

Position: Psychology Instructor, Community College
Employer: A small western college
Salary: $11,000/9 months
Job description: Master's degree required. Instructor will teach one to three sections of introductory psychology and two to four classes from interest areas including family relations, child and adult development, educational psychology, personality, social psychology, and experimental psychology. Additional duties will include advising entering and first-year students.

Successful applicant: Stephen Cranmore, 41, entered Georgia Institute of Technology as an engineering student, but took a leave of absence after his sophomore year to serve three years in the Navy. He returned to the Georgia Institute of Technology, switched to a psychology major, and graduated with a bachelor's degree. While teaching behavioral sciences in a city high school in Athens, Georgia, Mr. Cranmore enrolled part-time in the College of Education at the University of Georgia. He completed a master's degree in educational psychology after five years, then taught at Miami-Dade Junior College in Miami, Florida, until he began his new position. He now teaches three sections of introductory psychology, one for majors and two for nonmajors, and he also teaches courses in personality and in social psychology. Active in the community and a popular counselor with his students, Mr. Cranmore helped develop a 24-hour telephone crisis center that is now staffed by him and a number of community and student volunteers.



CAREERS IN PSYCHOLOGY

RESEARCH

SOCIAL PSYCHOLOGISTS typically study the effects of one or more people (groups) on the behavior of an individual. Whereas a sociologist is interested in the behavior of whole groups, the social psychologist studies individuals as they are influenced by those groups.

The research methods of social psychologists vary as widely as their research interests. Social psychologists may be found doing research in laboratories or out in the "real world." Acquisition of beliefs, attitudes, and values, effects of the environment on behavior, looking at persons in groups, and learning of social roles are just a few of the topics that may interest social psychologists.

Position: Professor, Social Psychology
Employer: A large midwestern university
Salary: $22,000/9 months
Job description: PhD in social psychology required, plus demonstrated research competence through substantial publication record. Responsibilities will include directorship of the Social Research Institute and supervision of the Institute's research programs. Applicant must also show ability to obtain research money from public and private funding agencies.

Successful applicant: Robert Matory, 47, graduated from the University of Kansas with a major in psychology. He continued his studies at Cornell University where he earned his PhD in social psychology without first obtaining a master's degree. His first teaching position was at Temple University in Philadelphia as an Assistant Professor. Before being promoted to Associate Professor, he spent five years teaching and doing research on the effects of televised violence on aggressive behavior in chil-

dren. While at Temple, he expanded his research interests to the study of the legal system. Four years ago, Dr. Matory moved to his current position where he serves as Director of the Social Research Institute. As Director, he has the responsibility of obtaining state and federal funds to support the Institute's investigations of the applications of psychology to legal affairs, specifically the social psychology of jury selection and deliberation. Under his direction, participants of the Institute have pursued investigations of witness identification and testimony as well as the social psychology of prisons. Dr. Matory has been active in working to reform the legal system, especially with respect to providing services for members of minority groups. He is a member of the National Association of Black Psychologists and the Society for the Psychological Study of Social Issues.

PSYCHOMETRIC (QUANTITATIVE) PSYCHOLOGISTS are directly concerned with the measurement of behavior (mostly through use of tests) and the design of research investigations. Such a psychologist may be analyzing complex sets of data; designing, developing, pilot testing, or validating versions of intelligence, personality, or aptitude tests; or deriving new statistics with which to analyze data. The psychometric or quantitative psychologist typically is well trained in mathematics, in statistics, and in the programming and uses of computers, especially for psychological research.

Position: Applied Quantitative Psychologist
Employer: A telephone company laboratory in New England
Salary: $19,000/12 months
Job description: PhD (or equivalent experience) in psychology required, plus a background in general experimental psychology and primary interest in statistical techniques with competence in basic experimental design techniques and data analysis. Employer prefers candidate with past experience in correlational techniques as well as computer-programming abilities.

Successful applicant: Karen Mulhaus, 29, earned a bachelor's degree in experimental psychology from Adelphi University and a master's and PhD in psychometrics from Syracuse University in New York. Dr. Mulhaus worked for three years in the Bell Telephone Laboratories as a statistician in a short-term research project before going to her present position. She is now part of a research team investigating common factors that influence use of telephones in different cultures. Dr. Mulhaus is specifically responsible for helping to design the upcoming research investigations and for doing statistical analyses of completed research.

INDUSTRIAL PSYCHOLOGISTS are concerned with aspects of people's work, such as their job satisfaction, their efficiency, and their morale. Such a psychologist may perform many jobs for an industry: study how work is organized; suggest changes to improve the satisfaction of the people who use the industry's services, the quality of the industry's services, and productivity; consult with management on the development of better training programs for employees; develop preretirement counseling programs; use scientific techniques to study employee morale; and recommend appropriate changes in job definitions, training programs, and the organization of work. A master's degree in industrial psychology is a minimum requirement, and most leadership positions in the field require a doctor's degree, usually the PhD.

Position: Industrial Psychologist
Employer: A large midwestern automotive company
Salary: $19,600/year
Job description: Master's degree required, PhD or equivalent experience given preference. Psychologist will supervise other psychologists who are responsible for organizing effective working groups, generating accurate position descriptions, designing culture-fair tests for use in selecting employees, and matching qualified personnel with appropriate jobs within the company. Opportunities to engage in market research also exist.

Successful applicant: Joyce Dallenbeck, 29, graduated with a double major in economics and psychology from the University of Alabama. She enrolled in the Graduate School of Business Administration at Harvard University, earning a Master of Business Administration degree in two years. After a year working for an accounting firm, Joyce Dallenbeck resigned and entered the graduate program in industrial psychology at the University of California at Los Angeles. On completion of her doctoral studies, Dr. Dallenbeck joined the automotive company's Industrial Psychology Group.

In addition to directing a staff of nine industrial, organizational, and personnel psychologists, Dr. Dallenbeck is continuing research started in connection with her doctoral dissertation on the development of automobile controls for the

physically handicapped. She is also a consultant for the company's affirmative action program.

PERSONNEL PSYCHOLOGISTS

(unlike industrial psychologists, whose responsibilities may range widely in industrial production and work settings) focus more specifically on the hiring, assignment, and promotion of employees to enhance their job satisfaction and productivity. Often relying heavily on the personnel interview and test data, the personnel psychologist is likely to be most familiar with the subject matter of experimental, developmental, differential, and social psychology as well as psychometrics. A Master of Arts or Master of Science degree is the minimum requirement for any position of responsibility in such work although jobs as test administrators and interviewers are available for those with bachelor's degrees.

Position: Personnel Measures/ Evaluation
Employer: A human resources laboratory on a southern military base
Salary: $11,614/12 months
Job description: Master's degree preferred, with prior experience in occupational analysis, job evaluation, selection and classification procedures, performance evaluation, test validation, and/or job satisfaction. Desired is a research psychologist in occupational and career development with interests in personnel or related research.

Successful applicant: Joseph Hutchings, 27, graduated with a bachelor's degree in psychology from the University of Virginia and completed the requirements for a master's degree in industrial psychology 18 months later at California State University at Long Beach. As a civilian employee of a branch of the United States military, Mr. Hutchings consults on the initial selection and job placement of recruits as well as the training of interviewers and other personnel specialists. He is currently conducting a study comparing several new interview techniques in an attempt to find the most effective technique for appropriate placement of military recruits on the job. He helps personnel establish criteria for evaluating on-the-job performance, advises management specialists on questions of employee morale, and is developing a special training program for recruits from disadvantaged backgrounds.

ENGINEERING PSYCHOLOGISTS

are concerned with designing and using environments and systems with which human beings live and work. Their job is to improve the interaction between humans and their environment. Engineering psychologists may help design work areas, equipment, and human-machine systems, as well as the training devices, aids, and requirements needed to prepare people to make such systems function. These psychologists work in many different settings such as the aerospace industry, communications and transportation industries, the military services, and other governmental, commercial, and industrial enterprises.

Position: Engineering Psychologist
Employer: A consulting firm in upstate New York
Salary: $18,000/year

Job description: PhD required, plus some appropriate experience. Desired is someone with ability to analyze relevant components of a complete job as related to design, construction, and operation of human-machine systems. The ability to work with people is also needed. Prior experience with simulators and programmed learning would be helpful.

Successful applicant: Juanita Martinez, 31, did her undergraduate work in economics at the University of Pittsburgh and obtained her master's degree in engineering psychology from New Mexico State University. For three years, Juanita Martinez worked at the National Aeronautics and Space Administration in Clear Lake, Texas, helping to design astronaut control panels for the Apollo moon capsule. She then returned to graduate school and obtained a PhD in human factors from Catholic University of America. In her new position, Dr. Martinez is supervising a project in which the needs for training a flight crew are being studied in order to determine the appropriate role of flight simulators in training. Her particular responsibility has involved specifying the simulator characteristics needed to meet training requirements. She is active in the American Psychological Association and also has served as Treasurer of the Association of Women in Science.

EXPERIMENTAL PSYCHOLOGISTS INVOLVED IN RESEARCH

may be found in a variety of settings, including colleges and universities, government, and private industry. The basic researcher is often found teaching one or two courses in a graduate program while devoting his or her primary attention to research activities. These activities vary with the interest and training

of the researcher. However, the processes of sensation and perception, psychological mechanisms, learning and motivation, and cognition are often the focus of the basic research questions of the experimental psychologist. A PhD is almost always required in this field.

To obtain research funds, the psychologist often must develop proposals describing studies that he or she would like to do. These proposals request money from private foundations and governmental funding agencies to finance the activity. There is often much competition for available money, and a proposal is not always successful in its request for funds. If funds are obtained, however, the researcher is able to achieve relative independence and direct his or her own program of research.

Position: Associate Professor, Experimental Psychologist
Employer: A large midwestern university
Salary: $16,500/10 months
Job description: PhD required as well as established competence in research, reflected in appropriate record of published work. Responsibilities will include supervision of the development of an animal laboratory that will be used for research projects of faculty and graduate students in experimental psychology programs. Teaching responsibilities will include one advanced graduate seminar per academic year and supervision of doctoral dissertations. Applicant is expected to pursue a program of research that will provide the training ground for graduate students and that will increase the reputation of the graduate program of the department.

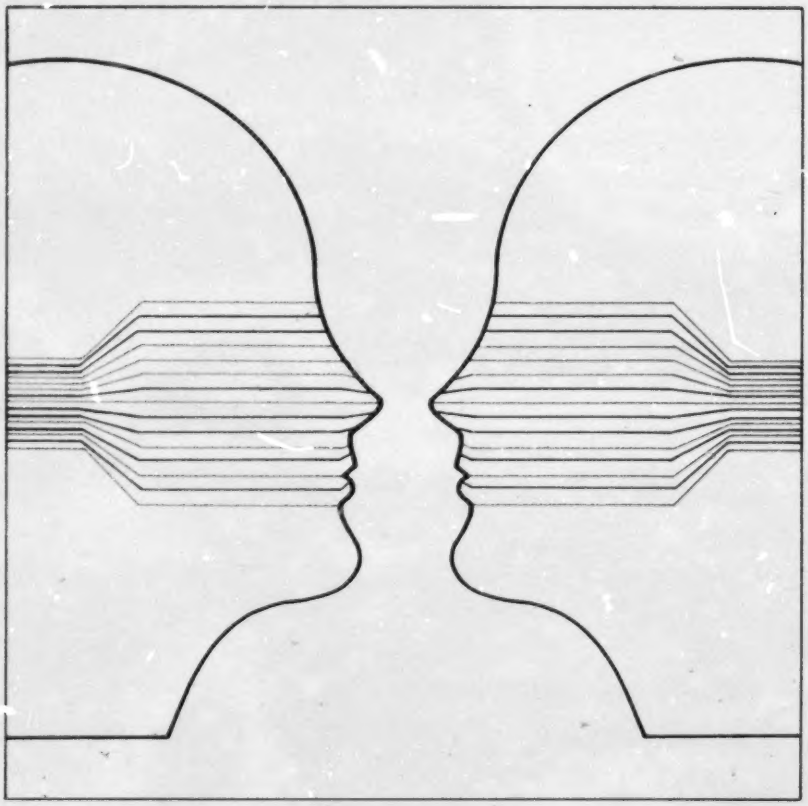
Successful applicant: Pat Scarfano, 36, graduated from the University of Nevada with a bachelor's degree in psychology and entered the graduate program in experimental psychology at Brown University, earning a PhD after five years of study.

Dr. Scarfano's first job was with the Institute for Behavioral Research studying choice behavior under conditions of stress. After four years of basic research experience, he accepted a position as Assistant Professor of Psychology at St. Louis University. There he was assigned a reduced teaching load in order to pursue laboratory research that had been funded by the National Institute of Mental Health. Since taking his present position, Dr. Scarfano has set up a laboratory facility and has continued a research program devoted to choice behavior using human as well as pigeon and rat populations for subjects. This program involves graduate student participation as well as collaboration with faculty colleagues.

EDUCATIONAL PSYCHOLOGISTS may actually be concerned with a range of activities from initial design through development and evaluation of both materials and procedures for education and training. Such positions exist in public school systems (usually large ones), in the military services, in private research and development companies, and in industrial concerns. This kind of psychologist may deal with analyzing education and training needs, with developing materials for instruction in various media, with designing the best conditions for instruction, and with evaluating the effectiveness of instructional programs. Typically, he or she has acquired skills associated with educational systems development, materials and media development, and educational evaluation.

Position: Instructional Design/ Evaluation (Educational Psychologist)
Employer: Board of Education in a large urban area
Salary: $17,500/12 months
Job description: Requires a PhD (or equivalent experience) in educational psychology with specialties in instructional design and in measurement/ evaluation. Basic psychological knowledge of human learning research and theory is desirable.

Successful applicant: June Harker, 27, earned her bachelor's and master's degrees in psychology from Tulane University, specializing in learning and related subjects. She received her PhD in educational psychology from Florida State University, where she studied instructional systems and measurement as part of her program. Dr. Harker now works in the Program Design and Evaluation Section of the school system. She is specifically responsible for directing the development and evaluation of several new instructional programs, working with teams that include teachers and curriculum specialists.



CAREERS
IN
PSYCHOLOGY

PUBLIC SERVICE

CLINICAL PSYCHOLOGISTS serve in many different circumstances. After a fairly traditional graduate preparation, and after supervised postdoctoral experience, some enter independent practice or joint independent-practice/consulting roles. Others find themselves responsible for a complete range of psychological services in public settings. Their responsibilities range from administering and scoring psychological tests, to engaging in therapy, to supervising the training of graduate students in the delivery of mental health services, to administering a community mental health program. Some clinical psychologists accept faculty positions in a college or university where they perform basic research and train graduate students. Others stay in independent practice, but also serve as adjunct professors in graduate training facilities, bringing their "real world" experience to students in advanced clinical training. Regardless of their primary activity, a number of clinical psychologists serve as consultants, especially to public activities and organizations offering services to the public. Clinical psychologists, by training and practice, are becoming community oriented and are beginning to serve as consultants and practitioners in identifying and eliminating what psychologists call "primary prevention settings," that is, situations that cause human problems.

Position: Clinical Psychologist
Employer: Group practice in a southwestern city
Salary: $26,000/year plus percentage
Job description: PhD required. Psychologist will join an established group of four clinical psychologists in an active practice with an average total load in excess of 200 patients. His or her primary work responsibilities will involve individual consultation and therapeutic

sessions with middle- and low-income families and clients.

Successful applicant: Russell Spence, 37, graduated from Bronx Community College, completing his undergraduate degree at the State University of New York at Stony Brook. He entered the clinical program at the University of Michigan, took his internship at the Washtenaw County Community Mental Health Center, and completed his doctoral studies after five years. Dr. Spence then was certified in Utah and entered private practice in Salt Lake City. At the same time, he served as a consultant to the Salt Lake City Mental Health Center and several local hospitals.

After nine years, Dr. Spence decided to enter a group practice and applied for the job described above. Since accepting the position, he finds his time occupied by consultation with a weekly average of 26 patients who are referred by medical doctors, psychiatrists, local hospitals, and a variety of other community contacts. He is primarily concerned with summarizing the results of psychological tests administered to those patients, consulting with his partners on psychological aspects of treating his own and their patients, as well as conducting therapeutic sessions with patients. He serves as a consultant to the city's Police Department and to the Board of Education of a unified school district nearby. He helps both of these community agencies to anticipate human problems and build in procedures to identify and prevent sources of personal conflict and stress.

COUNSELING PSYCHOLOGISTS

are involved with a broad specialty overlapping with clinical, organizational, educational, and social psychology. Counseling psychologists' activities usually include some combination of counseling, teaching, consulting, research, and administration. In their work, they are particularly concerned with the role of education and work in individuals' functioning and with the interaction between individuals and the environments in which they live.

Typically, counseling psychologists work with normal or moderately maladjusted persons, individually or in groups. This work includes use of traditional counseling interview methods; interest, ability, and personality tests; and educational and occupational information. Often they employ behavior modification procedures to enable individuals to change their behaviors.

Through consulting activities, counseling psychologists work to foster more productive problem solving among the individuals and groups who seek their assistance. In their research and administrative functions, counseling psychologists tend to be data oriented in defining and solving problems of counseling, training, outcomes of programs, and the like. In all of these roles, the counseling psychologists' goals can be viewed as remedial or rehabilitative, preventive, and/or developmental in nature.

The great majority of counseling psychologists are employed in educational settings and most of those in colleges or universities. A minority are employed in hospitals (most notably the Veterans Administration), community mental health or rehabilitation centers, industry, government, or in private or community counseling agencies.

Position: Counseling Psychologist, Assistant Professor
Employer: A counseling center and department of psychology in a large university
Salary: $14,000/10 months
Job description: PhD required, including internship and experience relevant to understanding both college student development and higher education environments. Responsibilities include counseling/therapy with individuals and groups, and consultation with campus units. Innovation in devising new counseling methods and developing new programs is encouraged. The position will carry rank and academic responsibilities in either the Department of Psychology or the Counseling and Personnel Services Department of the College of Education.

Successful applicant: Ronald Samuelson, 27, graduated from Oberlin College with a major in psychology and a minor in education. He completed his MA and PhD degrees at the University of Minnesota. During graduate school, he spent one year as a volunteer worker in the campus crisis center and two years as a teaching and research assistant. His doctoral research concerned outcomes of two types of counseling services for students. He completed a year's internship at the Counseling Center, University of California. His present position is Counseling Psychologist and Assistant Professor of Psychology. In the Counseling Center, he spends a half day with walk-in students and has 15 available interview hours for continuing clients. He is a consultant to a residence hall director and is developing a self-administerable counseling method to relieve examination anxiety. He is also preparing a manuscript for publication based on part of his dissertation research. His departmental teaching consists of supervising four graduate students in a year-long counseling practicum plus acting as academic adviser for two graduate students.

CHILD CLINICAL PSYCHOLOGISTS demand preparation practically identical to that required of any clinical psychologist; in addition, they have the responsibility of becoming acquainted with the developmental characteristics that influence the unique, generally preadolescent patients with whom they deal. Additional experience in the areas of social psychology, counseling psychology, and tests and measurements may be required.

Position: Child/Clinical Psychologist
Employer: A community mental health center in New England
Salary: $21,000/year
Job description: PhD required. At least three years of experience, with emphasis on parent-child interaction. His or her duties will involve individual and group psychotherapy with children and their parents as well as diagnostic evaluations of patients, including their family environment. Work will involve outpatients only.

Successful applicant: Ernestine Jefferson, 36, entered the University of North Carolina to major in sociology, intending to go to graduate school in social work. Midway through her sophomore year, she transferred into psychology, took a heavy load of courses in the clinical/personality area, and graduated with a bachelor's degree in psychology. After two years working as a ward attendant in the Eastern State Hospital in Knoxville, Tennessee, Ernestine Jefferson entered the University of Dayton, from which she earned her master's degree in child/developmental psychology. From there, she enrolled in the Department of Human Development and Family Studies at Cornell University and graduated with a PhD in child and family psychopathology. Following an internship in clinical psychology at the Emma Pendleton Bradley Hospital in Riverside, Rhode Island, Dr. Jefferson worked there for six years as a child/clinical psychologist. Her new assignment at the Community Mental Health Center involves individual and group psychotherapy with children and their families. Where appropriate, she uses the techniques of behavior modification both therapeutically and as an instructional tool for teaching parents how to modify their children's abnormal behavior. Dr. Jefferson also supervises a Center staff of five psychologists and three graduate students from the local university. She has helped to start a crisis intervention program at the Center; she has developed a preschool program that involves community mental health workers and that is aimed at easing mental health problems in marginal-income families; and she has participated in residential and therapeutic school programs.

SCHOOL PSYCHOLOGISTS are concerned with increasing the effectiveness of schools in improving the intellectual, social, and emotional development of children. School psychologists may also serve as consultants in education for the handicapped, mentally disturbed, or mentally retarded; or in developing special programs in adult education. They typically function in various roles within the school system. As research specialists, they may assist in implementing and evaluating special education projects. They may serve as leaders of in-service training programs for teachers or as consultants to teachers regarding specific teaching or classroom-behavior problems. They may also help to treat children's psychological and educational problems that influence behavior in school. Some school psychologists also have responsibility for administering the results of standardized tests. A master's degree and state certification are generally required of all school psychologists, and a doctoral degree may be required of persons in supervisory positions.

Position: School Psychologist
Employer: A midwestern county school system
Salary: $12,000/12 months
Job description: Master's degree; experience desirable, but not required. Must be certified or capable of obtaining state certification as a school psychologist. Job will include test administration and evaluation and consultation with parents and teachers. Some travel within the county will be expected.

Successful applicant: Lee Castillo, 29, graduated from the University of Nevada at Las Vegas with a bachelor's degree in psychology. During college, as student coordinator of the University's Volunteer Service Program, he was responsible for matching undergraduate volunteer workers with communities in southern Nevada that requested assistance. He later entered Western Kentucky University, from which he graduated with a master's degree in school psychology. Lee Castillo now spends about four days a week in the county schools, typically the junior high schools. Two days a week he gives reading, aptitude, and intelligence tests to 13- and 14-year-olds who are having trouble in school. The other three days he consults with parents or teachers.

MENTAL HEALTH ASSISTANTS are the result of the recent and rapid development of associate-degree programs in the community colleges. These training programs have produced a large pool of people well qualified for a variety of paraprofessional occupations in state hospitals, mental health centers, mental retardation centers, senior citizen service centers, and other human service settings. Such occupations often include opportunities for training on the job, and the mental health assistant is often supervised on a weekly, monthly, or "as-needed" basis by a psychologist, psychiatrist, social worker, or nurse. His or her work activities usually involve screening and evaluation of new patients, other direct patient-contact activities, record keeping, advocacy of patients' needs, and assistance in community consultation. Training at the associate-degree level is usually sufficient, although a bachelor's degree with appropriate mental health emphasis is sometimes preferred. (It is important here not to confuse mental illness and mental retardation. Mental illness as experienced by patients admitted to mental hospitals typically involves a personality disorder that interferes with a person's ability to function in the modern world. Mental retardation, on the other hand, refers to a reduced intellectual capacity that does not necessarily involve any personality disorder.)

Position: Mental Health Assistant
Employer: A state hospital located in the South
Salary: $6,800/year
Job description: Associate or bachelor's degree preferred; experience preferred, but not necessary. Job involves major responsibilities for assisting with and conducting intake screening and evaluation activities for new

patients in the resident population. Applicant will be under the supervision of a staff psychologist.

Successful applicant: Dale Higgins, 20, graduated from Blair High School in Takoma Park, Maryland, and commuted to Montgomery College to earn an Associate of Arts degree as a Mental Health Associate. The state hospital where he now works is a regional mental hospital offering its services and facilities to the southwestern counties of the state. Supervised on a weekly basis by the chief psychologist, the chief social worker, and the community relations specialist, Mr. Higgins shares responsibility with three other mental health assistants for procedures involved in admitting new patients, conducting interviews, gathering information on the patients' family situations, recording the patients' history and background, administering structured psychological tests, and taking patients' temperature and blood pressure. The mental health assistants are encouraged to continue their education through a hospital/university-sponsored seminar program. This continuing education program leads to advanced degrees and to job advancement.

Defining who is and who is not a psychologist can be a difficult task. Clearly, any worker in a mental hospital is more or less directly in contact with resident patients, and any earlier study of the discipline and principles of psychology would be helpful for such workers. A variety of jobs exist, however, that provide nonpsychologists with exposure to the same problems with which psychologists are wrestling. These jobs include ward attendant, nurse's aide, and volunteer activities in local community health-service agencies.

Position: Ward Attendant
Employers: An institute for rehabilitation of the handicapped and mentally retarded
Salary: $5,000/year
Job description: High school graduate preferred, equivalent experience prerequisite. Position involves maintaining services (cleaning, bathing, replacing bed linens, etc.) in a 40-bed ward of the hospital. Movement and assistance with control of patients will also be required.

Successful applicant: Fran Simpson, 19, graduated from Palo Alto High School with no wish to go to college. Having an interest in psychology and a desire to do something that would help people, he applied for the position of ward attendant. Since joining the staff, in addition to ward responsibilities, Fran Simpson has suggested a variety of recreational events for patients, including art projects, guitar concerts, and sports activities.

So there you have a sample of psychologists—their training, their jobs, and their activities. It is easier now, perhaps, to understand why someone defining psychology as a body of knowledge, a method for research, or the use of knowledge to promote human welfare would be only partly right, and why someone who says it's a little of each would be closer to the truth. Psychologists today are rarely only teachers, scientists, or professionals; most psychologists combine two or more of these roles. Thus, a psychologist may be primarily a teacher, a researcher, or a service provider but still include all three types of activities as part of his or her regular routine.

ANOTHER WAY TO ANSWER THE QUESTION

In answer to the question "What is psychology?" we have described what some selected psychologists are called, where they may work, and what they are likely to be doing. Now we will give you a larger picture of careers in psychology. In 1972 the American Psychological Association asked its members what they considered their primary work specialty. The first graph (Figure 1) shows how 27,371 psychologists answered that question. The percentages for psychologists holding the master's degree are given separately from those for psychologists who hold the doctor's degree. These figures show that the percentages of psychologists in the various categories differ depending on degree held. For example, 28.6% of the persons with master's degrees are found in the fields of counseling and school psychology, while for psychologists with doctorates the proportion is 10.3%.

Another way to look at careers in psychology is to ask "Who hires psychologists?" or "Where do they work?" As the number of psychologists has grown, so too has the variety of answers to these questions. The second graph (Figure 2) describes where some psychologists may be found in the work force (doctorates and master's degrees are combined).

If you add up the percentages, you can see that 62% are employed in an educational setting, 50% in universities and colleges; 21% are employed in the service settings of hospitals, clinics, and private practice. You may be curious why Figure 1 showed that clinical psychologists are the largest single group of psychologists, while at the same time Figure 2 shows that the employers of psychologists are mainly educational institutions—colleges, universities, and school systems. Many clinical psychologists work in academic settings, partly because the three roles of the psychologist—teacher, scientist, and professional—can be conveniently combined in that environment. There a psychologist in any of the specialties normally has access to the institution's research facilities, to its counseling centers, and to a variety of other related facilities. Regardless of their subfield of psychology, psychologists in such settings may be found teaching undergraduate students the general principles and methods of psychology or guiding the studies or research of graduate students in their own or related subfields.

Looking at activities is a third way to describe careers in psychology. The third graph (Figure 3) is a summary of how the APA members answering the questionnaire described their primary work activity. As you can see, psychologists in the largest category (39%) spend most of their time in the application or practice of psychology; psychologists who primarily teach are the second largest group (24%).

We have seen that psychologists are involved in a broad array of activities in different work settings, and have reached these positions from a variety of educational backgrounds. There are many persons who apply psychological knowledge in their jobs, but who may not be called psychologists. To be considered a psychologist some amount of advanced training beyond the bachelor's degree is necessary. At what point can one consider oneself to be a psychologist? When does society consider one to be a psychologist? These issues are subject to much debate both in the profession and in legal circles. The focus of that debate is training—the subject to which we now turn.

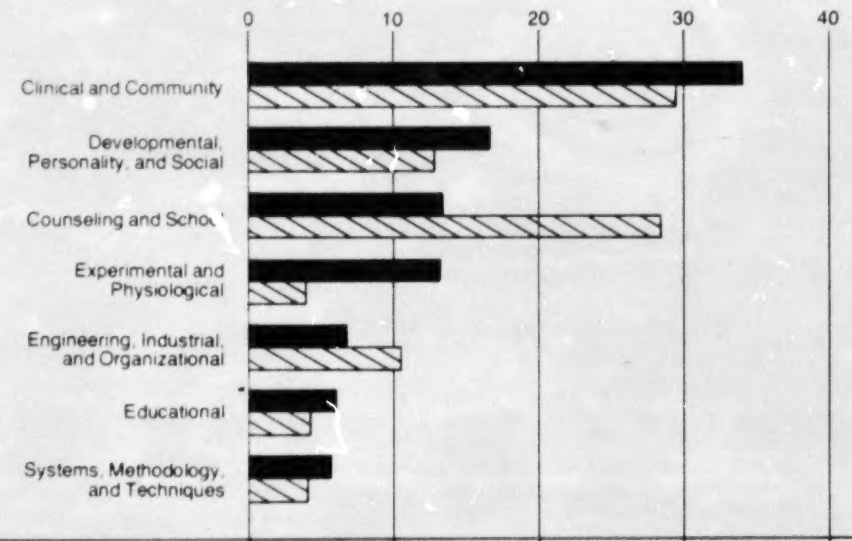


Figure 1.

Primary scientific specialty of 26,862 psychologists, given in percentages. (Data are taken from 1972 survey of psychologists in the United States and Canada who are members of the American Psychological Association.)

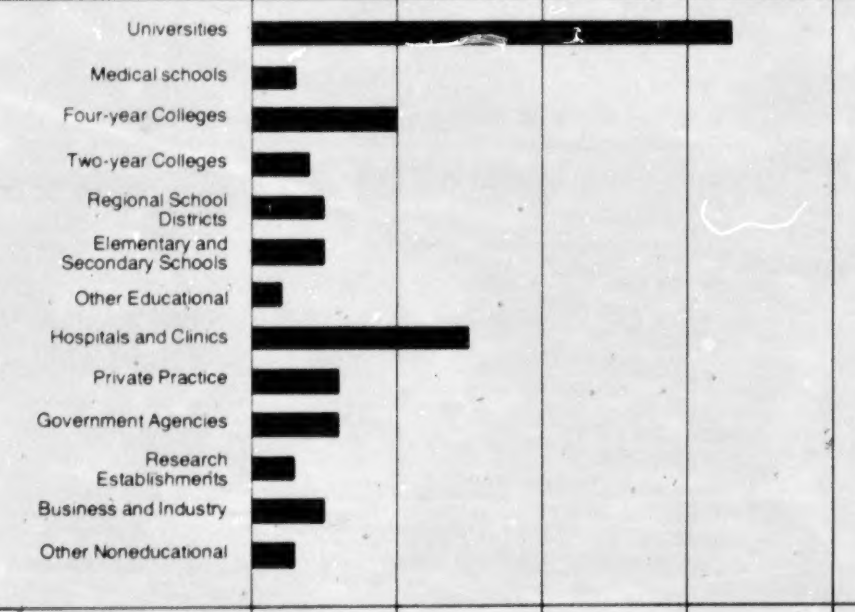


Figure 2.

Employment settings of psychologists in percentages. (Data are taken from 1972 survey of psychologists in the United States and Canada who are members of the American Psychological Association.)

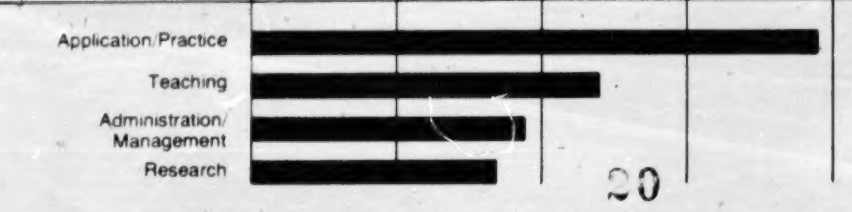
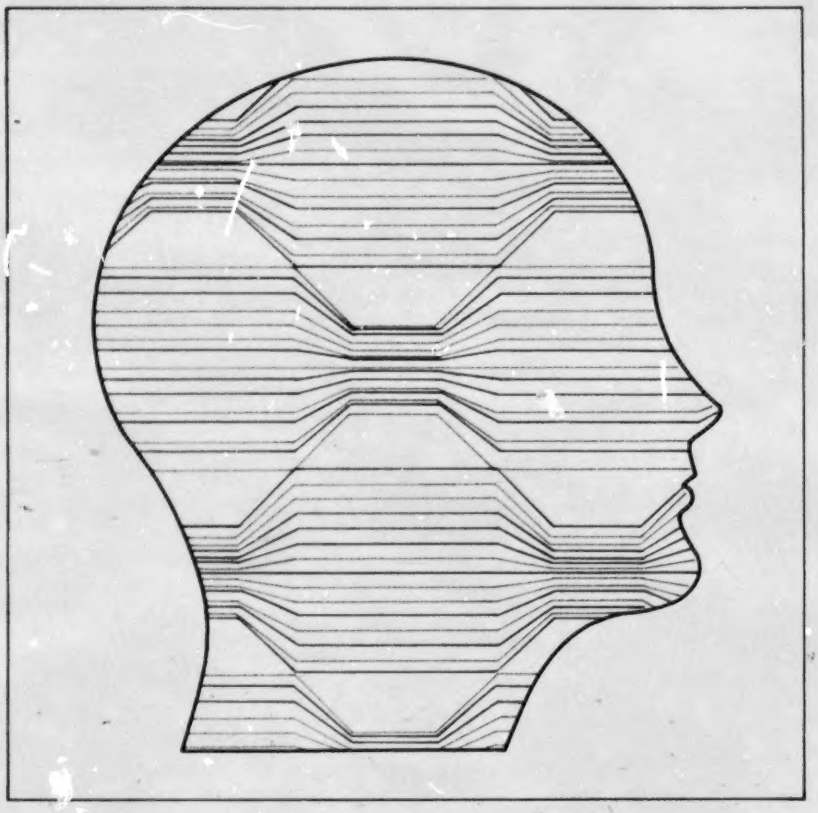


Figure 3.

Primary work activity of psychologists in percentages. (Data are taken from 1972 survey of psychologists in the United States and Canada who are members of the American Psychological Association.)



HOW DO I BECOME A PSYCHOLOGIST?

There are many routes to becoming a psychologist, and exactly what you will have to do will depend on the type of psychologist you want to become. Below are the first steps you should consider.

HIGH SCHOOL STUDENTS

Your first decision as a high school student will be to pick a college. Finding one that offers an undergraduate major in psychology will not be difficult. At the undergraduate level, psychology is currently the most popular of all areas granting bachelor's degrees. About 50,000 bachelor's degrees a year are currently being awarded to psychology majors. As you have seen in the descriptions of psychologists at work, there are many colleges or universities that offer a wide range of programs in psychology at the undergraduate level. The programs are as diverse as the schools and faculties that offer them. Our best advice to you is to shop around. Consult your teachers, guidance counselors, parents, and friends. If there is an institution of higher learning nearby, you could contact a member of the psychology faculty to discuss the local program and the psychology programs of other schools.

The "Additional Sources of Information" section at the end of this booklet contains references to books and pamphlets likely to be found in your local library that describe various colleges and universities around the country and abroad.

If you wish to obtain your undergraduate degree from a school that also has a graduate program in psychology, consult the book called *Graduate Study in Psychology*. It is an annual publication of the American Psychological As-

sociation (APA) and is available for $5.00 from the Order Department of the APA, 1200 17th Street, N.W., Washington, D.C. 20036. When you find a college or university with which you are generally pleased, contact a member of the faculty in the department of psychology there to discuss the psychology programs in that school.

COLLEGE STUDENTS

If you are in college and intend to apply for admission to a graduate program in psychology, the previously mentioned *Graduate Study in Psychology* will tell you about graduate programs around the country, opportunities for graduate study in psychology, and possible sources for financial support.

If you are interested in clinical, counseling, or school psychology, or are planning a career that will involve service to the public, two other things you should know about are (a) APA accreditation and (b) state licensing or certification.

Accreditation is a process by which the American Psychological Association evaluates doctoral-level programs in the clinical, counseling, and school psychology areas. Its purpose is to ensure that psychologists who perform public service functions in those fields will be adequately trained. Those doctoral programs that apply and meet or exceed a set of standards are "accredited." An up-to-date list of colleges and universities with accredited programs is published three times a year in the *American Psychologist*, an APA journal. For the current list of accredited programs in clinical, counseling, and school psychology, write to the Educational Affairs Office of APA, 1200 17th Street, N.W., Washington, D.C. 20036.

Licensing or certification is a means used by state governments to protect the public. This process ensures that individual psychologists have met or exceeded state-set standards of education, knowledge, and experience. Completion of an accredited graduate program does not ensure state licensing or certification of the individual graduate; moreover, graduation from a *nonaccredited* program does not necessarily prevent certification or licensing. The use of the title *psychologist* by those who offer their services to the public for a fee is restricted in most states to persons who have met the standards defined by law and who have been appropriately licensed. Standards set by the profession itself (and by most state laws) define a qualified professional psychologist as one with a doctoral degree in psychology and at least one and preferably two years of supervised experience in an internship. Most state regulations (and federal regulations where applicable) require at least a master's degree for a position as a psychologist. Some states also provide for different levels of certification, including some that have requirements over and above those for master's-degree certification, but short of those necessary for the PhD; these levels of certification generally reflect the various levels of training a person may have experienced.

WHAT DIFFERENCE DOES EDUCATION AND TRAINING MAKE?

As is true of other professions, the extent of education and training is a major factor in determining how much responsibility a psychologist will have and what opportunities will be open.

DOCTORAL LEVEL

Doctoral-level psychologists typically have been exposed to the broadest variety of knowledge and techniques in psychology over the longest period of time. The Doctor of Philosophy (PhD) requires at least three years of education beyond the bachelor's degree, and it ordinarily takes four or more years to earn. Earning the doctor's degree demands a high level of academic achievement. Doctoral students in many professional specialties complete an internship (on-the-job training that is closely supervised) either before or immediately after the award of the doctor's degree; such internships normally add at least one year to the total training time. In some fields, after earning the PhD, certain students may continue in postdoctoral research positions for one or two years.

Psychologists holding the doctor's degree tend to have the widest range of work choices. For example, a clinical or counseling psychologist with a PhD could work in a university, in a rehabilitation setting, or even in an industrial setting, and be qualified to give therapy to people ranging from preschool-level children to business executives with personal-adjustment problems.

The PhD is a research degree; to earn it, a person usually has to make an original research contribution to the field of psychology (i.e., write a dissertation) as part of the training. In recent years many psychologists have questioned whether the PhD program is an appropriate training experience for clinical psychologists who want to be therapists rather than scientists; as a result, an alternative program has been developed called the Doctor of Psychology (PsyD). The primary difference between the two degrees is that PsyD training involves more time gaining practical experience instead of the PhD training time that is normally spent in research activities. In addition, the PsyD typically does not require completion of a research project.

The Doctor of Education (EdD) is another type of doctoral degree that can be held by psychologists. Whereas the PhD is a research degree, the EdD is typically a professional degree awarded following successful completion of a program of courses focused on education as a vocation and profession.

MASTER'S LEVEL

Master's-level psychologists normally have spent from one to two years in graduate school after the bachelor's degree and have completed additional requirements such as practical experience in an applied setting or a master's thesis based on a research project. Psychologists with a master's degree are nevertheless found in a variety of settings; for example, teaching in two-year colleges, or in laboratories doing research in fields such as human factors, engineering psychology, industrial psy-

chology, and human-performance technology. These psychologists are also found in a broad variety of public and private treatment facilities, in private practice in some states, and in school settings. Master's-level psychologists typically have a somewhat more limited range of opportunities open to them than doctoral-level psychologists, who have had more education and training.

BACHELOR'S LEVEL

Bachelor's-level programs have evolved during the last few years. New programs in some colleges and universities have been developed to train workers who, under direct supervision, may give, score, and sometimes interpret certain psychological tests, may work directly with clients and their families, or may help individuals and communities to use their abilities to solve their problems. Typical work settings include community mental health centers, vocational rehabilitation offices, and correctional programs. Similarly, although more likely to be called a teacher than a psychologist, another occupation for those with at least bachelor's-level training is teaching psychology in secondary schools.

ASSOCIATE DEGREE LEVEL

Associate-degree training for particular jobs in psychological and other kinds of work has been developed in recent years. Persons with this training tend to have fewer work choices than those with bachelor's degrees, often due to the fact that an employer is unaware of the type of training that these degrees offer. These people are qualified to do interviewing, to give and score specific psychological tests, and to communicate the needs of persons, families, and communities to psychologists and other professionals. In most settings they can expect to work under the direct supervision of persons with more education.

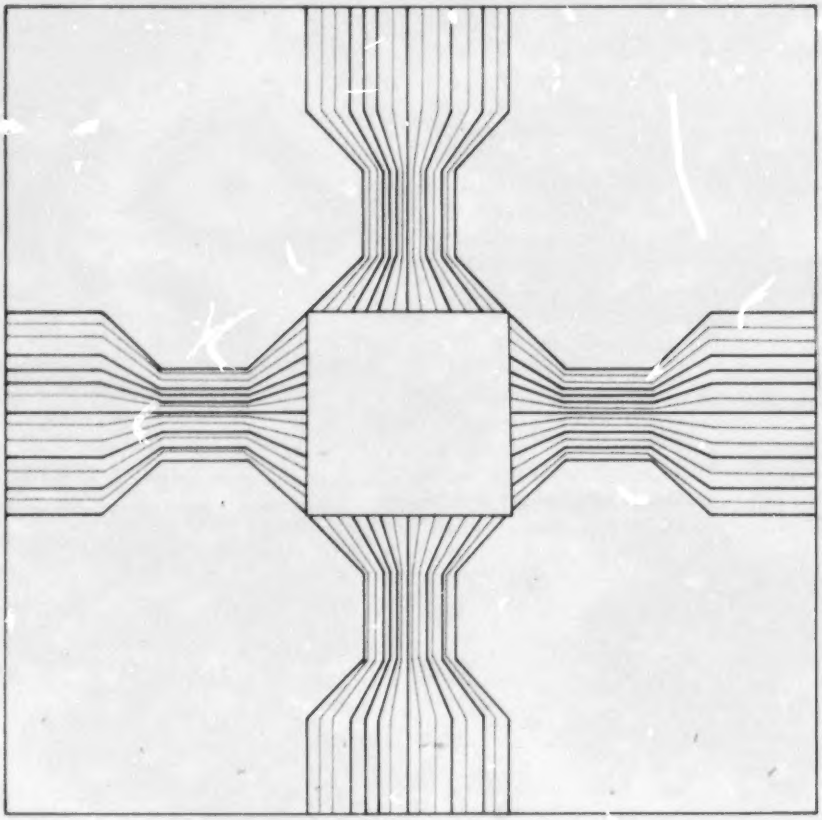
As you consider a career in psychology, an important goal to keep in mind is your flexibility of choice: Keep different job options open for yourself. Plan your education in psychology so that you have broad exposure to its many aspects, as well as to other disciplines. Avoid specializing too soon. Realize also that the limits described above are typical and do not prevent moving to a higher level of training. Formal education does not completely determine the final level of achievement in work. Depending on the specific abilities of the particular person involved, areas of responsibility for some master's-level psychologists exceed those of some PhDs. Personal skill and ability are crucial. Broad exposure to psychology will ensure that you are making the wisest choice for both your training and your career, based on the best available evidence, namely, carefully planned personal experience.

A career choice should be based on a thorough exploration of various alternatives so that one's interests, abilities, and values are most suitably matched with one's selected lifework. There are many careers that differ substantially from psychology itself, but in which psychological knowledge, techniques, and skills are applied. These careers include psychiatry, psychiatric nursing, social work, work as a mental health technician, certain aspects of personnel work, human engineering, community planning, and even product-analysis and sales. Undergraduate studies in psychology would help in developing a career in any one of these related fields, but they would have to be coupled with specialized study (at the graduate level in some cases) for some of these related career fields.

If you are thinking about a career in psychology, you may want to consider for a minute psychology's recent past and how it is changing. Psychology has been undergoing very rapid change over the last years, and the trends are likely to continue for a while. For example, five years ago an earlier version of this booklet did not even discuss the associate degree as a career option. New jobs in psychology and mental health work are constantly evolving, and new education and training programs are being developed to suit those new jobs. At any given time, the best source of information about educational requirements for a particular career in psychology will be the institutions that offer training programs for such careers.

At the undergraduate level, psychology is now the most popular of all areas granting bachelor's degrees. About 50,000 bachelor's degrees a year are currently being awarded to psychology majors. A report published in the *Teaching of Psychology Newsletter* early in 1974 indicated that approximately 30% of the students who graduate with a bachelor's degree in psychology go on to enter graduate school in psychology. Another 25% do graduate work in some other field (law, medicine, social work, sociology, etc.), and about 45% finish their education with the bachelor's degree. Of this latter group, approximately 75% subsequently find jobs in a field related to psychology.

As a result of the large number of bachelor's degrees awarded in psychology, and due to widespread interest in psychology, admission to psychology graduate programs is increasingly highly competitive. Even so, there are approximately 4,000 master's degree and 2,500 doctor's degree recipients in psychology each year.



WHERE IS PSYCHOLOGY HEADED?

One person's guess about the future may be as good as another's, but the trends in the development of psychology over the past five to ten years do seem to give some hints about psychology's immediate future. Preserving the three-part definition of psychology as a body of knowledge, as methods of research, and as the application of knowledge, we can make the following guesses about the near future.

TEACHING

In teaching, there is room for innovation at the college or university level (both graduate and undergraduate). College-level personnel are usually hired for abilities both as researchers and as teachers. However, prospects for employment in the immediate future as a teacher/researcher in a four-year college or university are limited by relatively stable student enrollments. By contrast, two-year colleges are experiencing growth and thus are adding faculty.

Perhaps the most optimistic employment prospects for teachers of psychology and behavioral sciences are at the precollege levels, especially in high school, although this trend may well be short-lived given the growing surplus of secondary-school teachers generally. Marked increases in enrollment by high school seniors in psychology courses have occurred over the past decade. Although some studies indicate the increase in enrollment is beginning to level off, nonetheless, current prospects for employment as a high school teacher of psychology are probably stronger than at any past time in the history of psychology, and short-term prospects for the future are good.

RESEARCH

In research efforts, successes are usually tied more or less directly to the federal, state, and private funds that are available to support research programs. There is little prospect for large increases in funding for such research programs, either for those aimed at specific problems or for the more general, traditional programs. Recent advancements in specific areas such as language development, physiological psychology; and operant conditioning are likely to continue; so is progress in areas such as cross-cultural personality and intelligence testing, human performance, engineering psychology, and program evaluation in fields related to psychology (e.g., law enforcement, education, and military service). However, prospects are not strong for increases in the number of jobs in the research area—jobs that traditionally demand at least a master's and more often a doctor's degree. Even prospects for support of graduate students in experimental psychology are somewhat limited. Similarly, at present, many PhDs with interest in research are university- or college-employed, but prospects for expansion in this job market appear quite limited, at least for the next five years.

PUBLIC SERVICE

In public service, the applied areas of the discipline have been affected by a variety of factors. For example, the use of tranquilizers has created more manageable conditions in mental hospitals. At the same time, new therapeutic philosophies that place greater emphasis on the home environment have developed. These two factors help to reduce the number of patients housed in large mental hospitals and decrease pressures to increase staff size. The next five years will probably see a stabilization of mental hospital populations with fewer resident inpatients, and the effect of this may well be an increase in the importance of community mental health centers as a focus of treatment programs.

Federal legislation in the early and mid-1970s has led to greater emphasis on Health Maintenance Organizations—a new concept that places the emphasis on maintaining good health rather than solely rehabilitating the sick. This, in turn, is likely to produce new roles for psychologists both in preventive and therapeutic situations and perhaps to create opportunities for group practice. More jobs may be created for paraprofessionals in community psychology and for individuals concerned with rehabilitation. Other areas in which some growth may be expected over the next five years are rural mental health centers, services for the aged, minority counseling, and day care.

As the demand for public service involving psychology grows and as the number of schools offering advanced training continues to increase, whole new fields of opportunity may be opened for people with less than doctoral-level training in psychology. At the same time, it should be noted that pressures of the marketplace are likely to increase the value of advanced training. As jobs in a given area of work become relatively scarce, those with the higher level of training may be more likely to be hired than those with lesser preparation even though the nature of the job itself may not have changed. Overall, these trends would suggest that the applied area of psychology has the strongest potential for growth over the next five years.

So there you have it. Psychology is a diverse discipline, difficult to describe and constantly changing. Its study is made all the more challenging by the debate between practitioners and researchers who each defend the virtues of their own approach to behavior. Matching appropriate solutions to appropriately framed questions is the task of psychologists in the immediate and more distant future. With growth at the predoctoral and paraprofessional levels—of jobs and of people willing to perform them—there is a real likelihood that psychology may remain the most popular undergraduate program of study. The number of people trained for the tasks ahead may be more than ample, however, so it is even more important for each individual to select carefully from among the career alternatives offered by psychology and many other fields.

Let us end with a description of the American Psychological Association. It is an organization of psychologists, and it offers a wide variety of services to the public, the professional psychologist, the researcher, the teacher, and perhaps most importantly, the student of psychology. What follows is a general description of the APA and a list of other sources of information for those interested in considering a career in psychology.

THE AMERICAN PSYCHOLOGICAL ASSOCIATION

The American Psychological Association (APA) is a society of scientists, teachers, and professionals organized by charter to advance psychology as a science and as a means of promoting the public welfare. Its membership in 1974 was approximately 37,000. The Association publishes scientific and professional journals in the various subject-matter areas and specialties of psychology. It also holds an annual convention to aid communication and exchange of new knowledge among psychologists. In addition, the APA sponsors various other meetings and activities that deal with the professional concerns and scientific interests of psychologists. These efforts are supported by many boards and committees consisting primarily of APA members who devote their attention to a wide variety of concerns, ranging from the social and ethical responsibilities of psychologists to their education and training.

The national efforts of APA are greatly facilitated by regional, state, and local associations. The time and place of the meetings of both the APA and the regional and other associations are listed each month in the *American Psychologist* or the *APA Monitor*, a newspaper for psychologists. The addresses and officers of any of these associations may be obtained by contacting the Administrative Services Department of the APA, 1200 17th Street, N.W., Washington, D.C. 20036.

DIVISIONS OF THE APA

The numerous interests and activities of psychologists are currently represented within the APA by the 33 divisions that are listed below. Psychologists who join the APA usually join one or more of these divisions according to their areas of training or interest. Information concerning the interest areas of divisions may be obtained from the division secretaries, whose addresses are published each November on the last page of the *American Psychologist*, or by writing to the Administrative Services Department of APA, 1200 17th Street, N.W., Washington, D.C. 20036.

1. General Psychology
2. Teaching of Psychology
3. Experimental Psychology
5. Evaluation and Measurement
6. Physiological and Comparative Psychology
7. Developmental Psychology
8. Personality and Social Psychology
9. The Society for the Psychological Study of Social Issues—A Division of the APA
10. Psychology and the Arts
12. Clinical Psychology
13. Consulting Psychology
14. Industrial and Organizational Psychology
15. Educational Psychology
16. School Psychology
17. Counseling Psychology
18. Psychologists in Public Service
19. Military Psychology
20. Adult Development and Aging
21. The Society of Engineering Psychologists—A Division of the APA
22. Rehabilitation Psychology
23. Consumer Psychology
24. Philosophical Psychology
25. Experimental Analysis of Behavior
26. History of Psychology
27. Community Psychology
28. Psychopharmacology
29. Psychotherapy
30. Psychological Hypnosis
31. State Psychological Association Affairs
32. Humanistic Psychology
33. Mental Retardation
34. Population Psychology
35. Psychology of Women

PUBLICATIONS

APA Journals

The APA itself publishes 15 psychological journals. Subscriptions generally range from $12 to $60 per year. These journals are generally available in college and university libraries:

American Psychologist: Official papers of the APA; articles on psychology; comments, announcements, and lists of regional, national, and international conventions.

Contemporary Psychology: Critical reviews of recent books, films, and other media; brief notes on new texts; previews of textbooks in psychology.

Developmental Psychology: Studies of the variables influencing growth, development, and aging.

Journal of Abnormal Psychology: Basic research and theory in the broad field of abnormal behavior, its determinants, and its correlates.

Journal of Applied Psychology: Theoretical and research contributions in applied fields such as business, industry; government, urban, and consumer affairs; legal, health, transportation, defense, and educational systems; and space and other new environments.

Journal of Comparative and Physiological Psychology: Research reports in comparative and physiological psychology.

Journal of Consulting and Clinical Psychology: Research and theory concerning clinical psychology including psychological diagnoses, psychotherapy, personality, and psychopathology.

Journal of Counseling Psychology: Theory, research, and practice concerning counseling and related activities of counselors and personnel workers.

Journal of Educational Psychology: Studies of learning and teaching including measurement of psychological development, psychology of school subjects, methods of instruction, and school adjustment.

Journal of Experimental Psychology: Research contributions of an experimental character. Published as four separate sections:

> **Journal of Experimental Psychology: General:** Longer articles in the three areas below, generally of broader interest to all experimental psychologists.
>
> **Journal of Experimental Psychology: Human Learning and Memory:** Concerns human acquisition, retention, and transfer processes.
>
> **Journal of Experimental Psychology: Human Perception and Performance:** Concerns information-processing operations as related to experience and performance.
>
> **Journal of Experimental Psychology: Animal Behavior Processes:** Concerns basic mechanisms of perception, learning, motivation, and performance, especially with infrahuman animals.

Journal of Personality and Social Psychology: Theory and research on personality dynamics, group processes, and the psychological aspects of social structure.

Professional Psychology: Applications of research, standards of practice, interprofessional relations, delivery of services, and innovative approaches to training.

Psychological Abstracts: Noncritical abstracts of the world's literature in psychology and related subjects ($190 per year).

Psychological Bulletin: Evaluative reviews of research literature, discussions of research methodology in psychology.

Psychological Review: Theoretical contributions attempting to integrate and discuss a broad range of psychological phenomena.

Division Journals

Many of the APA divisions also publish newsletters and journals. Some of these journals include:

Division 2—**Teaching of Psychology**

Division 9—**Journal of Social Issues**

Division 12—**Journal of Clinical Child Psychology**

Division 15—**The Educational Psychologist**

Division 17—**The Counseling Psychologist**

Division 22—**Rehabilitation Psychology**

Division 29—**Psychotherapy: Theory, Research and Practice**

Division 35—**The Psychology of Women**

Other APA sources of information

In addition to the journals, the APA also publishes other information concerning its own membership and activities, including the following:

APA Biographical Directory: Biographical, geographical, and divisional membership listings of APA Associates, Members, and Fellows; published every two years.

APA Membership Register: Names, addresses, and status as Fellow, Member, or Associate in APA and divisions; published in alternate years when a *Directory* is not published.

APA Monitor: News about APA, behavioral science legislation, and general happenings in psychology.

Employment Bulletin: Notices of vacancies and situations wanted. Typically, positions requiring at least the master's degree are listed; published monthly.

The Consolidated Roster for Psychology (1973): A listing of psychologists in the United States and Canada without regard to membership in APA.

Information Services

In addition to the journals and other sources of information, APA makes available two other services as aids in surveying or communicating large amounts of information. One is the **Journal Supplement Abstract Service (JSAS),** which generally contains large amounts of original materials relevant to psychology, independent of the type, format, length, or subject-matter content. The other is **Psychological Abstracts Search and Retrieval (PASAR),** which permits a computerized search in the subject-matter literature of articles that have been summarized in a short paragraph.

ADDITIONAL SOURCES OF INFORMATION

A variety of other information sources are available to persons seeking information about a career in psychology. A partial listing follows:

Books and Booklets

American Psychological Association. *Psychology as a profession.* Washington, D.C.: Author, 1968.

American Psychological Association. *Graduate study in psychology: 1975-1976* (Rev. annually). Washington, D.C.: Author, 1974.

Ash, P. (Ed.). *Jobs in psychology* (Rev. ed.; Job Family Series No. 15). Chicago: Science Research Associates, 1970.

Babco, E. *Science and engineering careers: A bibliography.* Washington, D.C.: Scientific Manpower Commission, 1974. (Address: 1776 Massachusetts Avenue, N.W., Washington, D.C. 20036.)

Cass, J., & Birnbaum, M. *Comparative guide to American colleges* (6th ed.). New York: Harper & Row, 1973.

Guilford, J. P. (Ed.). *Fields of psychology* (3rd ed.). New York: Van Nostrand, 1966.

Hawes, G. R. *The new American guide to colleges* (4th ed.). New York: Columbia University Press, 1972.

National Commission on Mental Health Manpower. *Careers in psychiatry.* (Roche Laboratories Ed.) Washington, D.C.: Macmillan, 1968.

Super, D. E. *Opportunities in psychology careers* (Rev ed.). Louisville, Ky.: Vocational Guidance Manuals, 1968.

Webb, W. B. (Ed.). *The profession of psychology.* New York: Holt, Rinehart & Winston, 1962.

Pamphlets

American Psychological Association, Division of Consumer Psychology. *Careers in consumer psychology.* Washington, D.C.: Author, 1973. (Address: 1200 17th Street, N.W., Washington, D.C. 20036)

American Psychological Association, Division of Counseling Psychology. *The counseling psychologist.* Washington, D.C.: Author, 1968. (Address: see above)

American Psychological Association, Division of Industrial Psychology. *A career in industrial psychology.* Washington, D.C.: Author, undated. (Address: see above)

American Psychological Association, Division of School Psychology. *The school psychologist.* Washington, D.C.: Author, 1972. (Address: see above)

Catalyst. *Psychology* (Career Opportunities Series No. C19). New York: Catalyst Publications, 1973. (Address: Six East 82nd Street, New York, New York 10028)

Catalyst. *Psychology* (Education Opportunities Series No. E19). New York: Catalyst Publications, 1973. (Address: see above)

Chronicle Guidance Publications, Inc. *Psychologist* (Occupational Brief No. 144). Moravia, N.Y.: Author, 1971.

College Entrance Examination Board. *Financial planning for study in the United States: A guide for students from other countries* (Rev. ed.). New York: Author, 1973. (Address: College Board Publication Order, Box 2815, Princeton, New Jersey 08540)

Hawes, G. R. *Entering higher education in the United States: A guide for students from other countries* (Rev. ed.). New York: College Entrance Examination Board, 1974. (Address: see above)

National Academy of Sciences, National Research Council. *A selected list of major fellowship opportunities and aids to advanced education for foreign nationals.* Washington, D.C.: Author, 1974. (Address: 2101 Constitution Avenue, N.W., Washington, D.C. 20518)

National Academy of Sciences, National Research Council. *A selected list of major fellowship opportunities and aids to advanced education for United States citizens.* Washington, D.C.: Author, 1974. (Address: see above)

Powledge, F. *New careers, real jobs, and opportunities for the disadvantaged* (Public Affairs Pamphlet No. 427). New York: Public Affairs Committee, 1968. (Address: 381 Park Avenue South, New York, New York 10016)

Rotman, B. T. *Careers in psychology.* Washington, D.C.: B'nai B'rith Vocational Service, 1968. (Address: 1640 Rhode Island Avenue, N.W., Washington, D.C. 20036)

SPECIAL GROUPS OF INTEREST TO STUDENTS

Groups concerned specifically with psychology

The groups listed below serve as valuable resources for information on selected areas of concern within the field of psychology. The top officer in a number of these organizations changes each year, but a current listing of the person to contact from each organization may be obtained from the person listed below or from the Department of Social and Ethical Responsibility of APA, 1200 17th Street, N.W., Washington, D.C. 20036.

Association of Asian-American Psychologists. An organization devoted to the concerns of the Asian-Americans in psychology. For information, contact:
Dr. Derald W. Sue, President
Department of Education
California State University at Hayward
Hayward, California 94542

Association of Psychologists for La Raza. An information and action agency representing the rights and opportunities of Mexican-American psychologists. For information, contact:
Mr. Ernest Bernal
Association for Psychologists for La Raza
Southwestern Educational Development Laboratory
800 Brazos
Austin, Texas 78701

Association for Women in Psychology. An association concerned with creating and maintaining opportunities for women in the field of psychology. For information, contact:
Dr. Leigh Marlowe
Association for Women in Psychology
180 West End Avenue
New York, New York 10023

Black Students Psychological Association. A central source of information on educational opportunities and financial assistance in psychology for black and other minority group students. For information, contact:
Mr. James Howard
Black Students Psychological Association
Box 3258
Berkeley, California 94703

Committee on Women in Psychology. A special committee of the APA devoted to the concerns of women in psychology. For information, contact:
Committee on Women in Psychology
American Psychological Association
1200 17th Street, N.W.
Washington, D.C. 20036

National Association for Black Psychologists. An organization devoted to the concerns of black psychologists. For information, contact:
Ms. Patricia Coppock
National Association for Black Psychologists
4050 Institute for Social Research
426 Thompson Street
Ann Arbor, Michigan 48106

Groups with interests overlapping those of APA

In addition to the groups of direct relevance to the student of psychology as listed above, there are a number of other professional associations whose activities overlap with the focus of the APA's efforts. The address and telephone number of such groups are listed below:

American Anthropological Association
1703 New Hampshire Avenue
Washington, D.C. 20009
(202) 232-8800

American Association for the Advancement of Science
1515 Massachusetts Avenue, N.W.
Washington, D.C. 20005
(202) 467-4400

American Council on Education
One Dupont Circle, N.W.
Washington, D.C. 20036
(202) 833-4700

American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610
(313) 751-6000

American Orthopsychiatric Association
1790 Broadway
New York, New York 10019
(212) 586-5690

American Personnel and Guidance Association
1607 New Hampshire Avenue, N.W.
Washington, D.C. 20009
(202) 483-4633

American Psychiatric Association
1700 Eighteenth Street, N.W.
Washington, D.C. 20009
(202) 232-7878

American Sociological Association
1722 N Street, N.W.
Washington, D.C. 20036
(202) 833-3410

National Association for Mental Health
1800 North Kent Street (Rosslyn)
Arlington, Virginia 22209
(703) 528-6405

National Association of School Psychologists
1140 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 872-0311

National Association of Social Workers
2 Park Avenue
New York, New York 10016
(212) 689-9771

National Education Association
1201 Sixteenth Street, N.W.
Washington, D.C. 20036
(202) 833-4000

National Institute of Mental Health
5600 Fishers Lane
Rockville, Maryland 20852
(301) 443-2404

Scientific Manpower Commission
1776 Massachusetts Avenue, N.W.
Washington, D.C. 20036
(202) 223-6995